#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-026047 Address: 333 Burma Road Date Inspected: 13-Jul-2011

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes N/A No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Trial Assembly

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Incident Report generated at Lift 14 East (Bottom Panel)

This Quality Assurance (QA) Inspector wrote an Incident Report for addressing the Bottom Panel, distorted locations at work point E3. Please reference the Incident Report # 04-0120F4\_TL-15\_B278\_07-13-2011\_14East\_Bottom Panel\_Distorted\_WP\_E3 dated July 13, 2011 for further detail.

Please reference the pictures attached for more comprehensive details.

Segment 13AE to Segment 13BE (Skin Flatness)

This QA Inspector performed Dimensional Inspection, to check the skin flatness between Segment 13AE to Segment 13BE between Panel Points (PP) 120 and PP 120.5 at the following locations:

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The skin flatness was measured on North side (Cross Beam Side at B1 and B2 locations) and South side (Bike Path Side at B3 and B4 locations) at 100mm from the weld connecting Bottom Panel to Side Panel using 2500mm string line to verify overall flatness. The straight edges of 600mm and 630 mm of length were also used to measure the localized flatness.

The skin flatness was measured on North side (Cross Beam side at T1 location) and South side (Bike Path Side at T2 location) at 100mm from the weld connecting Deck Panel to Edge Panel using 2500mm string line to verify overall flatness. The straight edges of 600mm and 630 mm length were also used to measure the localized flatness.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Lift 14 West (FL3 location)

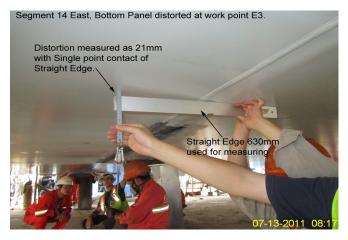
This QA Inspector was requested by ZPMC QA and QC for verifying the tension verification for Lift 14 West Bottom Plate connecting the FL3 flange at PP 125, PP 126 and PP 127.

Prior to verifying the tension verification QA Inspector performed the Visual Inspection (VT) for the bolt assemblies installed location and observed that painting was not performed at the faying surfaces were the bolts was installed.

Blasting mark was traced at PP 125 and PP 126, west side of the vertical floor beam, asked the ZPMC QC Mr. Zhang Hai Jung to remove the bolts, get paint applied and installed fresh bolts and re-offer for inspection. ZPMC QC agreed for the same.

Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





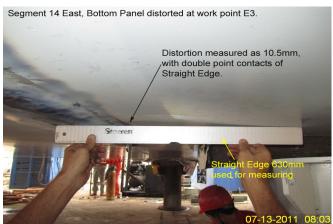
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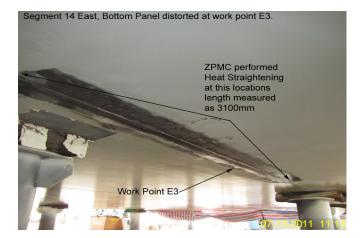






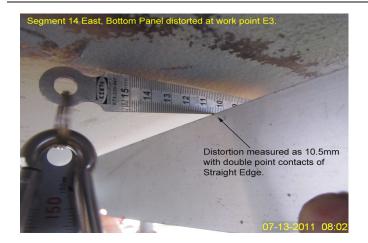






# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer